INSTALLATION INSTRUCTIONS

8K RAM MODULE

FOR TANDY MODEL 100

Congratulations on your purchase of the 8K memory upgrade! This model is constructed using low power CMOS static RAM and manufactured to the highest standards of workmanship.

To open the computer, please follow these instructions carefully.

1. Transfer the files in your computer to a cassette or some mass storage medium. We will be turning off the memory power and this will erase the files in memory.

2. Make sure the computer is off. Turn the computer over so that the black bottom is facing up. Turn off the memory power switch.

3. Using a Phillips screwdriver, remove the four screws as shown in Figure 1.

4. Turn the computer to the side where the "ANS/ORIG" switch is located. Insert a small screwdriver at mid section between the two halves of the case. There is a latch inside that holds the two halves together. Pry open the upper and lower case at this point. Do the same at the mid section on the side where the space bar is located.

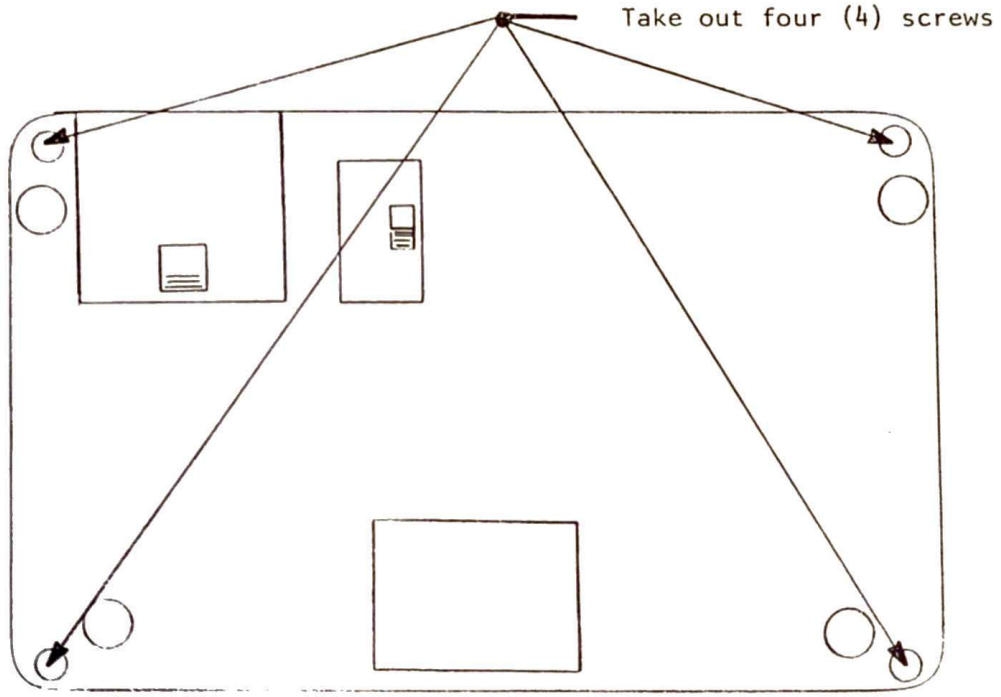

FIGURE 1

To install the modules, please do the following:

1. Locate the three sockets on the main PC board labeled "Optional RAM #1, "Optional RAM #2," and "Optional RAM #3". Refer to Figure 2.

2. Align the pins of the modules with the holes in the sockets of the computer.

3. Make sure that the indentation on the memory chip matches that of the silk screen patterns on the PC board. Refer to Figure 3.

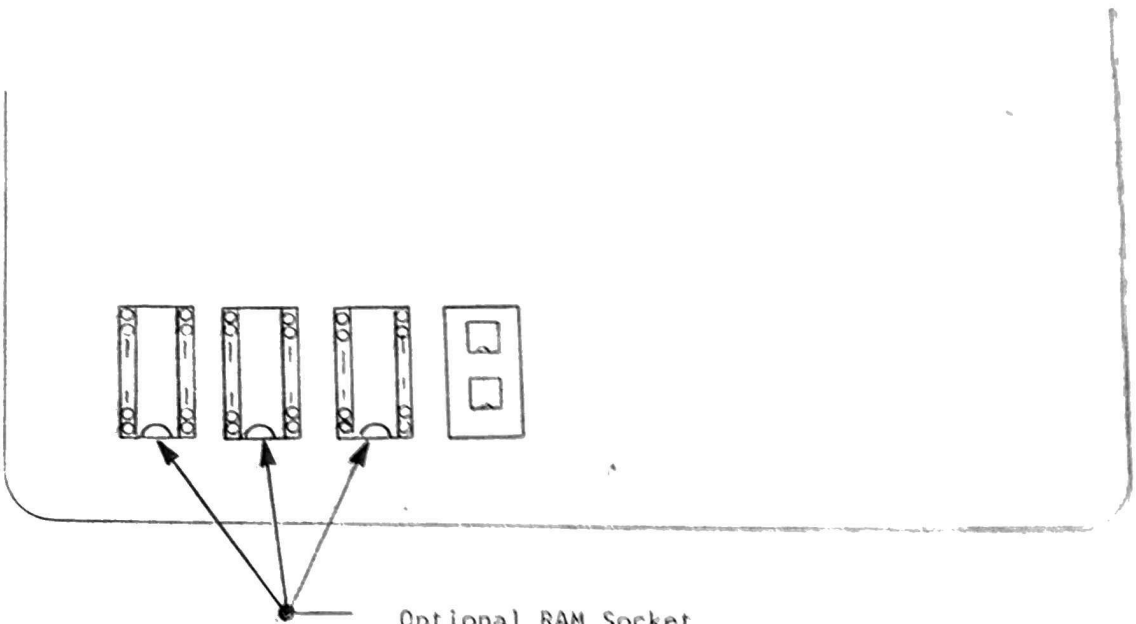

FIGURE 2

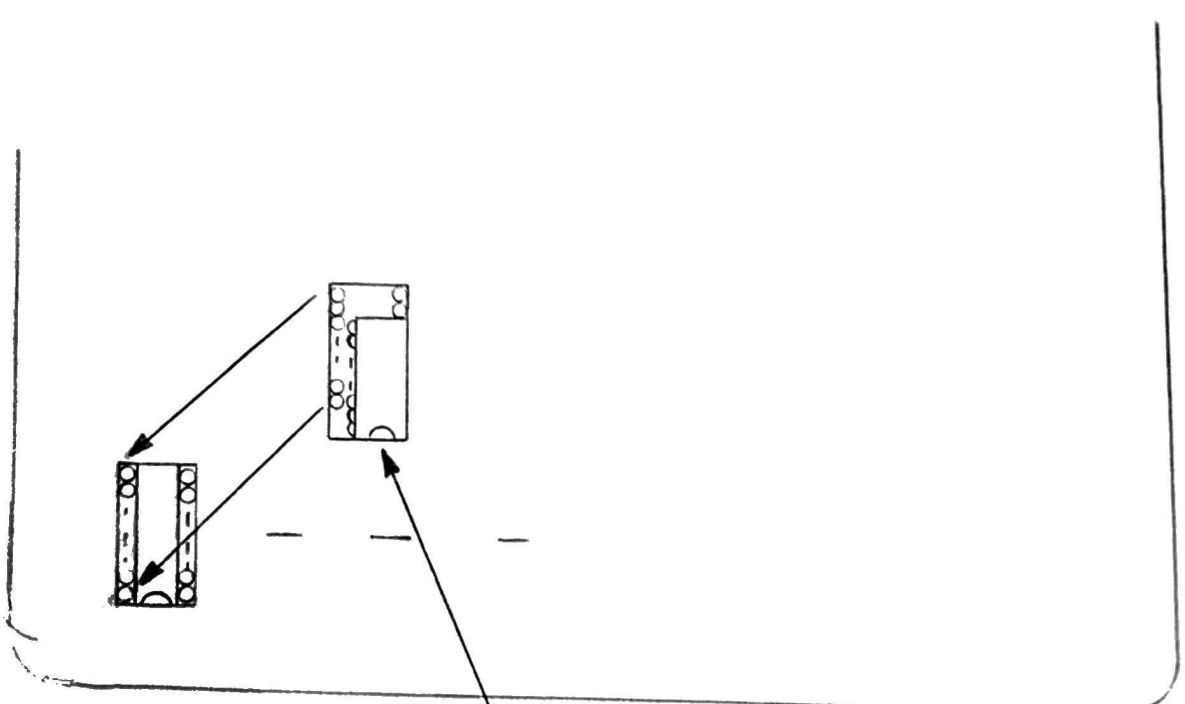

FIGURE 3

4. Push on one side of the chip and then the other until the module seats completely. When the module is seated completely you will no longer be able to see any of the pins and the module board will rest completely on the socket.

To reassemble the computer, please reverse the disassembly steps. Be sure to turn the memory switch to the on position. Power up the computer.

The computer automatically searches for the additional memory and will display the total RAM minus the executive software overhead.

32K of RAM will show up as a total of 29638 bytes available. If what is shown on the screen does not reflect the additional RAM, the modules may not be seated completely.

Open the computer as instructed and insure that the modules are seated by pushing more forcefully on the memory chip.

If the additional RAM is shown on the screen but then drops intermittently and suddenly to a lower figure, it is also likely that the modules are not seated and that you will have to go through the steps again.

Attached are two memory test programs. The top program performs the memory test with a selected data pattern. The record program tests all memory chips in the computer with random data pattern. The second program will test memory non-stop until a SHIFT-BREAK is pressed. If error occurs in either program, the location, the write pattern and the read pattern will be displayed.

```
5 PRINT"--MEMORY TEST PROGRAM WITH CHOICE OF DATA PATTERN--":PRINT
10 INPUT"HOW MANY 8K CHIPS IN YOUR UNIT";M
15 INPUT"SELECT 8K CHIP TO TEST,<1,2,3,4>";N
20 IF N<1 OR N>M THEN PRINT,"***NO CHIP***":PRINT:GOTO15
30 INPUT"TEST DATA PATTERN,<0 THRU. 255>";B
40 J=65535 -8192*(N-1):K=J-8192
50 IF N=1 THEN J=J-4096 ELSE IF N=M THEN K=K+2500
60 FOR I=J TO K STEP-1
70 D=PEEK(I):POKE I,B:C=PEEK(I)
80 IF B<>C THEN 100 ELSE POKE I,D
90 PRINT"CELL: ";I:NEXT I:GOTO 15
100 PRINT"ADDRESS","WRITE/READ":PRINT I,B;"/";C
200 END
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5 PRINT"----MEMORY TEST PROGRAM FOR BURNIN----":PRINT
10 INPUT"HOW MANY 8K CHIPS IN YOUR UNIT";M
20 J=65535 -4096:K=J-8192*M+4096+2500
30 FOR I=J TO K STEP-1
40 B=1
50 FOR H=1 TO 8
60 D=PEEK(I):POKE I,B:C=PEEK(I)
70 IF B<>C THEN 200 ELSE POKE I,D
80 B=2^H:NEXT H
90 B=254
100 FOR H=1 TO 8
110 D=PEEK(I):POKE I,B:C=PEEK(I)
120 IF B<>C THEN 200 ELSE POKE I,D
130 B=255-(2^H):NEXT H
140 PRINT"CELL: ";I:NEXT I:GOTO 30
200 PRINT"ADDRESS","WRITE/READ":PRINT I,B;"/";C
300 END
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